

Florkey 8-2-9-16-2

WHAT IS CLAIMED IS:

1. In a wireless communication system wherein a call is established between a mobile unit and one or more participating units, and wherein a service interruption is detected to the mobile unit during the call, yielding a suspended call, a method comprising:

monitoring for a reconnect message issued from the mobile unit, defining a mobile-originated reconnect (MORC) message; and

if a MORC message is received before expiration of a waiting period, reconnecting the mobile unit to the suspended call, yielding a connected call.

2. The method of claim 1, performed by a mobile switching center (MSC) serving the mobile unit when the service interruption is detected.

3. The method of claim 1, further comprising ending the call if a MORC message is not received before expiration of the waiting period.

4. The method of claim 1, further comprising:

monitoring for a message issued from the mobile unit declining a reconnect attempt, defining a reconnect decline message; and

ending the call if a reconnect decline message is received before expiration of the waiting period.

5. The method of claim 1, further comprising maintaining a database of session information associated with a plurality of suspended calls, the session information including indicia of one or more participating units for each of the suspended calls, the step of reconnecting comprising:

retrieving session information associated with the suspended call of the mobile unit, yielding retrieved information; and

reconnecting the mobile unit to the one or more participating units identified in the retrieved information.

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6. The method of claim 5, wherein the step of retrieving session information comprises:

obtaining, from the MORC message, a session identifier associated with the suspended call of the mobile unit;

querying the database for session information corresponding to the session identifier; and

if session information corresponding to the session identifier is found, retrieving the session information.

7. The method of claim 5, wherein the step of retrieving session information comprises:

obtaining, from the MORC message, a mobile unit identifier associated with the mobile unit;

querying the database for session information corresponding to the mobile unit identifier; and

if session information corresponding to the mobile unit identifier is found, retrieving the session information.

8. The method of claim 5, further comprising authenticating the one or more participating units identified in the retrieved information.

9. The method of claim 1, further comprising maintaining call state information associated with the mobile unit, the method comprising:

entering a suspended call state when service interruption is detected to the mobile unit, the step of monitoring for a reconnect message being accomplished with the mobile unit in the suspended call state;

entering a reconnecting call state if a MORC message is received before expiration of a waiting period, the step of reconnecting the mobile unit being accomplished with the mobile unit in the reconnecting call state; and

entering a connected call state if the mobile unit is reconnected to the suspended call before expiration of the waiting period.

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10. In a wireless communication system wherein a call is established between a mobile unit and one or more participating units, and wherein a service interruption is detected to the mobile unit during the call, yielding a suspended call, a method comprising the mobile unit:

issuing a mobile-originated reconnect (MORC) message, the MORC message defining a request for reconnection to the suspended call; and

if the suspended call is reconnected before expiration of a waiting period, resuming the call; otherwise ending the suspended call.

11. The method of claim 10, further comprising the mobile unit maintaining call state information associated with the suspended call, the method comprising:

entering a suspended call state when service interruption is detected to the mobile unit, the step of issuing a MORC message being accomplished with the mobile unit in the suspended call state;

entering a reconnecting call state after issuing the MORC message, to await possible reconnection of the call;

entering a connected call state if the mobile unit is reconnected to the suspended call before expiration of the waiting period; and

entering an idle call state if the mobile unit is not reconnected to the suspended call before expiration of the waiting period.

12. The method of claim 10, wherein the step of issuing a MORC message is accomplished automatically responsive to detecting the service interruption.

13. The method of claim 10, further comprising the mobile unit:

displaying reconnect options to a user, the reconnect options including a mobile-originated reconnect (MORC) option; and

monitoring for user selection of the MORC option, the step of issuing a MORC message being accomplished responsive to detecting user selection of the MORC option.

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14. The method of claim 10 wherein the step of issuing a MORC message includes sending a message including a session identifier associated with the suspended call.

15. The method of claim 10 wherein the step of issuing a MORC message includes sending a message including a mobile unit identifier associated with the mobile unit.

16. The method of claim 10 wherein the step of issuing a MORC message includes sending the MORC message to a serving mobile switching center (MSC).

17. A method comprising a mobile unit, responsive to detecting a service interruption in a call, performing steps of:
prompting a user of the mobile unit to select a reconnect option;
detecting user selection of a reconnect option, defining a user-selected option;
and
sending a message informing a serving mobile switching center (MSC) of the user-selected option.

18. The method of claim 17, wherein the step of detecting a user-selected option comprises detecting user selection of a mobile-originated reconnect (MORC) option, the step of sending a message comprising sending a mobile-originated reconnect (MORC) message to the serving MSC.

19. The method of claim 17, wherein the step of detecting a user-selected option comprising detecting user selection of a reconnect decline option, the step of sending a message comprising sending a reconnect decline message to the serving MSC.

20. The method of claim 17, further comprising sending a signal to the user informing the user of the service interruption, the signal comprising one or more of a text message, audio alarm or visual alarm.